

# ERA-NET Cofund Smart Urban Futures

## Joint Call for Proposals

### Full Proposal: Consortium, General and Financial Information

#### 1. Project Overview

Project Short Title/Acronym: <b>CAPA.CITY</b>									
Project Full Title: <b>Building Capacity to transform existing residential subdivisions into smart and robust urban ecosystems</b>									
Project Coordinator/Main Applicant: <b>Hasselt University</b>									
Topics: (tick the relevant topic(s)) <input checked="" type="checkbox"/> Topic 1. Concepts and strategies for smart urban transformation, growth and shrinkage <input type="checkbox"/> Topic 2. New dynamics of public services <input type="checkbox"/> Topic 3. Inclusive, vibrant and accessible urban communities									
Keyword 1: <b>collective capabilities</b> Keyword 2: <b>location-based experiential learning</b> Keyword 3: <b>residential subdivisions</b>									
Overall project type: (mark the relevant category/categories with X [for weaker dominance] or XX [for higher dominance] – cf. chapter 4, Annex B and table 1 of the call text)									
<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;">X</td> <td style="width: 33%;">XX</td> <td style="width: 33%;"></td> </tr> <tr> <td>Strategic research</td> <td>Applied research</td> <td>Innovation and implementation</td> </tr> </table>				X	XX		Strategic research	Applied research	Innovation and implementation
X	XX								
Strategic research	Applied research	Innovation and implementation							
Total Project Costs in EUR:	<b>580.000</b>	Requested funds in EUR:	<b>489.500</b>						
Duration of the Project in months (max. 36):	<b>36</b>	Expected start:	<b>01.01.2017</b>						
Total Effort in Person Months:	<b>93</b>	Expected end:	<b>31.12.2019</b>						

## 2. Abstract

Developing smart and sustainable transformation pathways, one of the aims of the ENSUF call, requires technical and conceptual innovation, both in terms of land-use, transport, environment and energy. CAPA.CITY starts from the hypothesis that these innovations can only be implemented in a durable way if they are supported by a process of **capacity building**. The main objective of CAPA.CITY is therefor to develop a theoretical and operational framework that can help the building of the, so-called, collective capabilities that are necessary to create smart and robust urban ecosystems. **Collective capabilities** refer to the ability of a group –consisting of citizens, businesses, NGO's and institutes- to meet a set of predefined objectives. The point of departure is that the building of these collective capabilities is a process of joint learning. For this reason, CAPA.CITY proposes to experiment with **location-based experiential learning methods** to trigger this process.

Given that joint learning is always context-dependent, the proposal of CAPA.CITY is to work within one particular urban context, namely **the retrofitting of existing residential subdivisions**. CAPA.CITY will initiate capacity building processes in 6 residential subdivisions located in Belgium, Denmark and France. And will explore 3 location-based experiential learning methods, namely **envisioning, pre-enacting and prototyping**.

## 3. Summary for the general public

A detached single family house in a residential subdivisions remains the most popular housing preference in Europe. And yet, the critique on these environments increases: the density is too low, the energy consumption too high, the car dependency too big, etc. The CAPA.CITY project departs from the hypothesis that a durable transformation of residential subdivisions requires collective learning processes during which residents, local authorities and organisations develop alternative scenarios for their residential subdivision, which may then lead to new coalitions, in turn generating actual projects. CAPA.CITY brings together methods and formulates recommendations to initiate such processes of collective learning.

#### 4. Project Consortium

	Organisation	Type of organisation <sup>1</sup>	Country / Funding agency <sup>2</sup>	Contact Person (first name and family name)
Project Coordinator/Main Applicant	Hasselt University (UH)	RO	Belgium/FWO	Oswald Devisch
Project Partner 2 <sup>3</sup>	Intrastructures (Intra)	SE	Belgium/FWO	Thomas Lomée
Project Partner 3	Roskilde University (RUC)	RO	Denmark/IFD	Majken Toftager Larsen
Project Partner 4		SE	Denmark/IFD	
Project Partner 5	Ecole Nationale Supérieure d'Architecture de Marseille (ENSA-M)	RO	France/ANR	Stéphane Hanrot
Project Partner 6	In Vivo (IV)	SE	France/ANR	David Miet

<sup>1</sup> Type of organisations: SE = small enterprise; ME = medium-sized enterprise; LE = large enterprise; RO = research organisation, OTH = other type of organization. With regard to the size of companies, the current definitions of SMEs given in the EU competition law are applied (definition of small and medium-sized enterprises and of independent businesses in accordance with recommendation 2003/361/EC of the Commission dated 6 May 2003, [ABl. L 124 of 20.5.2003, pp. 36-41]; cf. [http://ec.europa.eu/enterprise/policies/sme/files/sme\\_definition/sme\\_user\\_guide\\_en.pdf](http://ec.europa.eu/enterprise/policies/sme/files/sme_definition/sme_user_guide_en.pdf)).

<sup>2</sup> Consortium partners from Belgium, Finland and Sweden must name their respective funding agency/agencies.

<sup>3</sup> "Project Partner" in this table means a Co-Applicant or a Co-operation Partner (see chapter 4 of the call text).

## 5. Quality of Work, Project Objectives and Targets (max. 4 pages)

### 5.1 Project objectives and targets

#### **\_CONTEXT: smart urban transformations require capacity building**

Developing smart and sustainable transformation pathways, one of the aims of the ENSUF call, requires technical and conceptual innovation, both in terms of land-use, transportation, environment and energy. **CAPA.CITY starts from the hypothesis that these innovations can only be implemented in a durable way if this implementation is supported by a process of capacity building.** The necessity to invest in capacity building has been acknowledged in spatial planning, for instance within strategic planning (Albrechts, 2004), community development and community planning. But, these frameworks mainly focus on understanding the conditions or requirements that are necessary to facilitate (democratic) processes of capacity building, but they hardly ever reflect on the operationalisation of the processes themselves.

The main literature on capacity building comes from international development studies. In an overview of this literature, Baser & Morgan (2008) make a distinction between competences, capabilities and capacities. Competences refer to the abilities of an individual to meet a set of pre-defined objectives. Whereas capabilities refer to the ability of a collective –consisting of citizens, businesses, NGO's and institutes- to meet these objectives. And capacities refer to the abilities of the system as a whole.

Within spatial planning, the focus mainly lies on how to trigger the individual citizen to participate in spatial policy making (i.e. on competences). But, as Baser & Morgan (2008) illustrate, improving the resilience of a system requires the collective action of both citizens, businesses, NGO's and institutes. **The point of departure of CAPA.CITY is therefore to focus on the building of collective capabilities.** Baser & Morgan (2008) define 5 core capabilities (see Figure 1) and outline a number of internal and external factors that have an impact on the processes of capacity development. Together these will serve as the starting point of this research proposal.

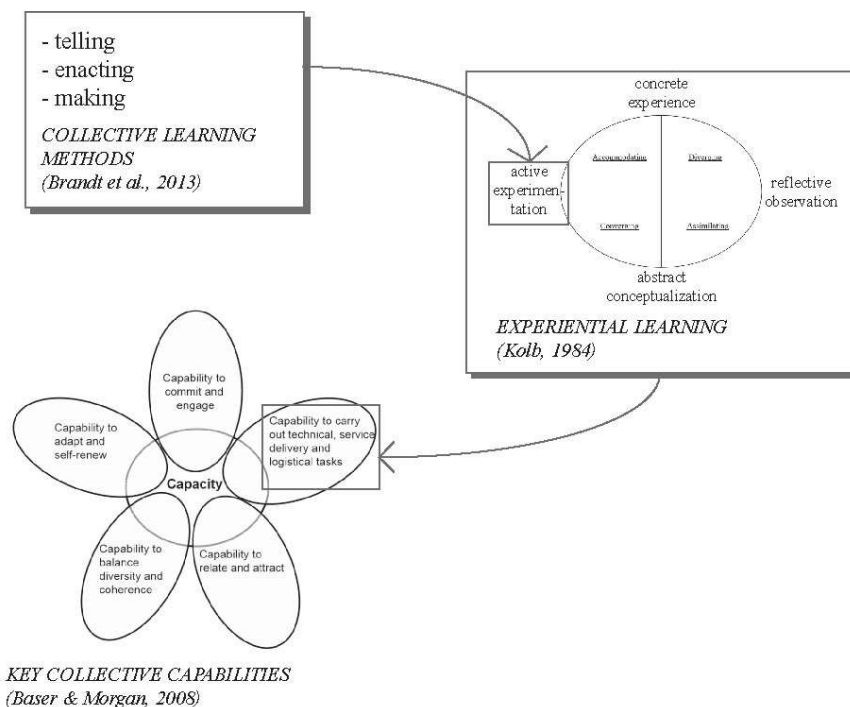


Fig. 1 the three conceptual frameworks that structure the research

The building of collective capabilities is a process of joint learning involving residents, community organizations, businesses, institutes, planners and politicians. To trigger this process, CAPA.CITY proposes to experiment with **location-based experiential learning methods** (Brown & Lambert, 2013; Elbakidze et al., 2015). Within the context of Participatory Design, Brandt et al. (2013) distinguish three clusters of methods that facilitate processes of joint learning, namely methods that support telling, making or enacting. As figure 1 illustrates, each experiment will explore one cluster. To allow comparison, all experiments will be framed within the 4-stage learning cycle of Kolb (1984).

### **\_RESEARCH OBJECTIVES: to operationalize the development of collective capabilities**

The main objective of CAPA.CITY is to develop a theoretical and operational framework that helps both academics and professionals to build the collective capabilities that are necessary to support 'the creation of smart and robust urban ecosystems'. This objective can be translated into the following sub-objectives:

- 1: which capabilities do we need to develop to support the creation of smart and robust urban ecosystems? The five core capabilities of Baser & Morgan (2008) will serve as guiding structure.
- 2: how can we improve the capabilities of a collective? Who needs to be involved? At which stage? What are the process requirements? What is the role of the spatial planner?
- 3: how can we assess the impact of capacity building on the creation of smart and robust urban ecosystems? How can we balance learning and accountability (Guijt, 2010)?
- 4: how can we develop an operational framework in such a way that it can be applied by professionals, both on the scale of a neighbourhood and on the scale of a region? Given that capacity building is a labour intensive process.

### **\_METHOD: 1° a focus on residential subdivisions**

The development of collective capabilities is context-dependent, as it relies on existing capabilities, precise objectives, internal resources, the cultural and historic context, etc. **The first proposal of CAPA.CITY is therefor to focus on one transition challenge, namely the retrofitting of existing residential subdivisions.** In Flanders 80% of the total housing stock consists of single-family houses, of which 42% is a detached house (SVR, 2010). In Denmark 44 % of the housing stock are detached houses (Statistics Demark 2015). In France 56% of the housing stock consists of single-family houses, and this proportion increases as, each year, there are more individual houses built than collective housing. In all three countries, the detached house remains the most preferred housing type. In spite of this status, an increasing number of residential subdivisions is facing (1) ecologic challenges (e.g. car dependency, energy consumption), (2) structural challenges (e.g. decreasing services), (3) economic challenges (e.g. overpriced real estate, oversupply) and (4) social challenges (e.g. ghettoization, increasing diversity). These 4 challenges do trigger innovative initiatives within the larger retrofitting-dynamic, but these remain ad hoc and isolated. On top of this, most residents of residential subdivisions live their housing dream. Because retrofitting proposals impact this dream, they are often faced with citizen protest. So, as argued earlier, a systematic and durable transition requires the building of collective capabilities, such as the core capability (1) to commit and engage, (2) to carry out technical, service delivery and logistical tasks, (3) to relate and to attract resources and support, (4) to adapt and self-renew, and (5) to balance diversity and coherence (Baser & Morgan, 2008).

### **\_METHOD: 2° action research**

The development of a theoretical and operational framework requires an iterative process that invites both academics and professionals in the testing of tools and approaches and in the reflection over experiments and findings. **The second proposal of CAPA.CITY is therefor to adopt the method of action research** (Wicks & Reason, 2009) and **initiate capacity building processes in 6 residential subdivisions** located in Belgium, Denmark and France. All are facing the four challenges, listed in the

previous section, be it to different degrees. All cases are part of ongoing research (see included letters of intention), so that the consortium partners have an extensive knowledge of local issues, spatial features, actors, opportunities, economic trends, legal context, etc.:

- Oud-Turnhout (B) is witnessing an increase in small households, a/o due to ageing and single parenting, leading to (1) **underusage** and (2) a demand for more **affordable houses**. The research question is how the retrofitting of residential subdivisions can address both issues.
- Lanaken (B) is heading towards a **real-estate crisis**. Villa-owners can no longer sell their property, a/o due to the economic crisis in the Netherlands. The same for old-houses, often of a lower quality, that cannot compete with new residential subdivisions. The research question is how to retrofit the residential subdivisions and villa parks in order to counter this economic crisis.
- Viby (Dk) is planned **to expand** with up to three times its current population, because it has a direct connection by train to the major regional towns. The research question is how this planned growth can help to increase the social and spatial quality of current residential subdivisions.
- (Dk)
- Périgueux (F) is experiencing **an ageing and decreasing population**, as young couples and families buy houses in the suburban area, far from amenities, where buildable land is affordable. The research question is how the densification of existing subdivisions can stop these trends.
- Aix-En-Provence (F) has **a growing population, but a lack of available land**. The research question is how to densify existing residential subdivision so that they respect the current architectural quality, biodiversity and energy balance.

#### **METHOD: 3° three location-based experiential learning methods**

As argued earlier, CAPA.CITY adopts the conceptual framework of Brandt et al. (2013) who distinguish three clusters of methods that facilitate processes of joint learning, namely methods that support **telling, making or enacting**. The research consortium has extensive experience with all methods (see also WP3):

- telling: In Vivo (F) developed the Bimby method to engage with residents of residential subdivisions
- enacting: X (Dk) developed games to facilitate participation to address urban issues
- making: Intrastructures (B) developed the OpenStructures platform to support the future prototyping

To allow comparison, all experiments will be framed within the 4-stage experiential learning cycle of Kolb (1984). In short, all experiment will go through the following stages: concrete experience, reflective observation, abstract conceptualization and active experimentation.

#### **EXPECTED RESULTS: a theoretical and operational framework on capability development**

In line with the CAPA.CITY research objectives, the expected results are (see also Table 6.2):

- 1: **a theoretical framework**, directed at academics. The theoretical frameworks will consist of a taxonomy of collective capabilities that help to create smart and robust urban ecosystems and an overview of the system conditions required to improve these capabilities. This theoretical framework will be discussed in series of **PhD workshops and journal papers** (see WP's).
- 2: **an operational framework**, directed at professionals, local authorities, local communities, etc. The operational framework will consists of retrofitting strategies, capability development protocols, debriefing protocols, and an integrated set of validated tools to support capacity building. This operational framework will be documented in a series of **national capacity building sessions, a book** (discussing both best practices and failure scenarios), **recommendations and a website** (see WP's).

3: **a learning network** of both academics and professionals on capacity building (to retrofit residential subdivisions)

## 5.2 Overall project type

**Strategic research** (weaker dominance): the objective is the translation of theoretical models of capacity building from the field of international development studies to the field of spatial planning.

**Applied research**: the objective is to build an operational framework that can help to develop collective capabilities that are necessary to support the creation of smart and robust urban ecosystems. And this with a focus on residential subdivisions.

## 5.3 Results from other projects

The table below discusses 5 projects carried out by the consortium partners in the past three years. Other relevant projects are summarized in section 11.2: individual project partners.

**Table 5.1: Existing results and deliverables obtained from publicly funded projects which provide the basis of or feed into the proposed project**

Funding provider	Pr. Nr.	Title	Description of results already obtained and relevant deliverables (verifiable results / products of R&D work) in terms of the basis for / differentiation from the proposed project
FWO	1	Large dwellings in Flanders. Development of architectural and users strategies in view of demographic trends and ecological constraints.	The research project (a collaboration between KULeuven & <b>Hasselt University</b> (UH)) analysed the impact of demographic trends on residential subdivisions; developed a state of the art on retrofitting (including strategies to introduce a transition) and provide insight in the obduracy of the housing culture. The project consisted of two PhD researches and a post-doc research. Marijn van de Weijer, one of the PhD student, is currently a post-doc researcher at Hasselt University.
Individual commissions	2	OpenStructures	The OpenStructures project, from <b>Intrastructures</b> (Intra), initiates a construction system where everyone designs for everyone. It is an ongoing experiment that wants to find out what happens if people design objects according to a shared modular grid, a common open standard that stimulates the exchange of parts, components, experiences and ideas and aspires to build things together. OpenStructures resulted in a series of objects and open source manuals displayed at exhibitions worldwide. CAPA.CITY will use Openstructures as a method to collectively prototype (see making alternative futures of existing residential subdivisions).
Interreg IV A-program	3	Urban Transition Öresund	Ten actors in the Öresund Region, municipalities and universities started up a cross-border cooperation to find new innovative solutions and strategies for sustainable urban development. Within this project, <b>RUC</b> experimented with urban games as a tool to initiate a collective learning process over sustainable urban developments.
	4	DK	
Individual commissions	5	Bimby	Bimby (Beauty in my Backyard), from laboratoire <b>In Vivo</b> (IV), is a collaborative, open source project addressing sprawl. The project believes in a bottom up approach, triggering single landowners to collectively invest in their everyday surroundings. Bimby has been applied in more than 100 municipalities throughout France and resulted in a manual, guidebook and wiki. CAPA.CITY will use Bimby as a method to engage (see telling) with residents of residential subdivisions.



## 6. Key activities (work programme)

### \_OVERALL STRATEGY of the work plan

As specified under '5.1 Project objectives and targets' CAPA.CITY proposes to adopt the method of **action research** to coproduce a theoretical and operational framework with both academics and professionals. The proposal puts forward **three conceptual frameworks** to structure the action research (see figure 1). In concrete, CAPA.CITY will initiate capacity building processes in **6 residential subdivisions** located in Belgium, Denmark and France. In each subdivision CAPA.CITY will experiment with **three location-based experiential learning methods**, telling, enacting & making (Brandt et al., 2013), in order to explore the **five key collective capabilities** (Baser & Morgan, 2008). This results in 18 experiments, as figure 2 illustrates.

			CORE CAPABILITIES (Baser & Morgan, 2008)									
			to commit and engage			to carry out technical, service delivery and logistical tasks.to relate and attract			to balance diversity & coherence. to adapt & self-renew			
			LOCATION-BASED EXPERIENTIAL LEARNING METHODS (Brandt et al., 2013)									
			telling	enacting	making	telling	enacting	making	telling	enacting	making	
			PROJECT PARTNER									
			6 IV	4	2 Intra	6 IV	4	2 Intra	6 IV	4	2 Intra	
CASE	1 Turnhout (B)	PROJECT PARTNER	1 UH			10.2017		04.2018		10.2018		
	2 Lanaken (B)		1 UH			10.2017		04.2018		10.2018		
	3 Viby (Dk)		3 RUC		10.2017		04.2018					10.2018
	4 (Dk)		3 RUC		10.2017		04.2018					10.2018
	5 Périgueux (F)		5 ENSA-M	10.2017					04.2018		10.2018	
	6 Aix-en-Pr. (F)		5 ENSA-M	10.2017					04.2018		10.2018	

Fig. 2 overview of the CAPA.CITY experiments

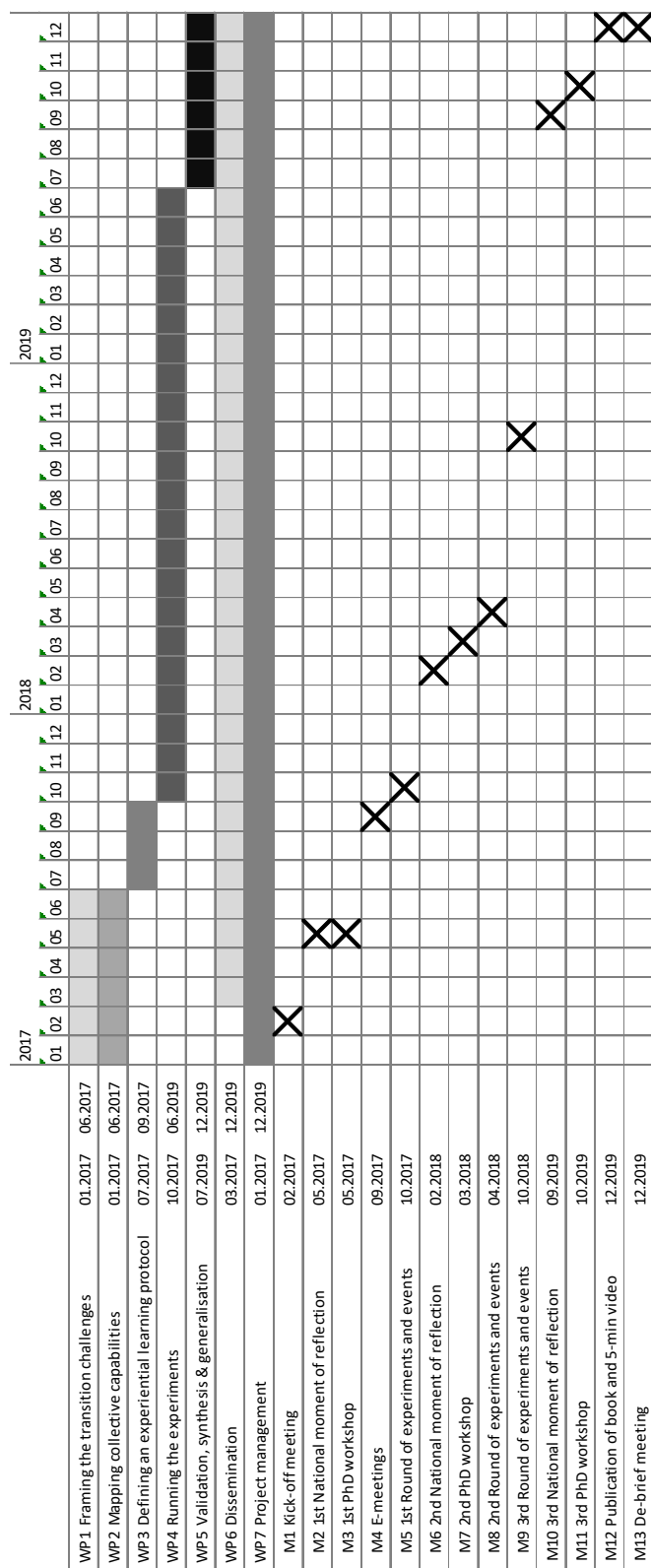
The **three professional partners** -Intra, X & IV- are selected to be part of the CAPA.CITY proposal because they each have **an extensive expertise in one of the experiential learning methods** (see 5.3 & 11.2). This will limit the time to prepare the experiments (to 9 months) and increase the chance for a positive and durable impact of the experiments on the capacity building process.

To allow for the exchange of experiences, data and lessons learned, between the 18 experiments, the three academic partners –UH, RUC & ENSA-M- will develop **clear goals, an experiential learning protocol, a documentation protocol and an action plan**.

The aim of the CAPA.CITY project is to both improve the collective capabilities of all actors involved in the cases and of professionals involved in the retrofitting of residential subdivisions in general. Given that capacity building requires clear communication, special attention is paid to **the dissemination of intermediate findings via national capacity building sessions, a web platform, a series of public events, a book and a 5-minute movie**.



## \_TIMING of the Work packages



## DETAILED WORK DESCRIPTION

The following tables present the work package list (table 6.1), the deliverables list (table 6.2), the list of milestones (table 6.3) and a description of each work package (table 6.4).

**Table 6.1: Work package list**

Work package No <sup>4</sup>	Work package title	Lead project partner No <sup>5</sup>	Lead project partner short name	Person-months <sup>6</sup>	Start month <sup>7</sup>	End month
1	Framing the transition challenges	5	ENSA-M		1.2017	06.2017
2	Mapping collective capabilities	3	RUC		1.2017	06.2017
3	Defining an experiential learning protocol	1	UH		07.2017	09.2017
4	Running the experiments	1	UH		10.2017	06.2019
5	Validation, synthesis & generalisation	3	RUC		07.2019	12.2019
6	Dissemination	1	UH		03.2017	12.2019
7	Project management	1	UH		01.2017	12.2019
			TOTAL			

<sup>4</sup> Work package number: WP 1 - WP n.

<sup>5</sup> Number of the project partner leading the work in this work package.

<sup>6</sup> The total number of person-months allocated to each work package.

<sup>7</sup> Measured in months from the project start date (month 1).

**Table 6.2: Deliverables List**

Del. no. <sup>8</sup>	Deliverable name	WP no.	Delivery date <sup>9</sup>
D1.1	A SWOT analysis	1	6
D1.2	A journal paper	1	6
D1.3	Data visualizations	1	6
D1.4	A blog	1	6
D1.5	A program for excursion	1	6
D1.6	A list of relevant organizations	1	6
D2.1	A conference paper on collective capabilities	2	6
D2.2	A conference paper on the theoretical framework	2	6
D2.3	Proceedings of the 1 <sup>st</sup> PhD workshop	2	6
D3.1	An action plan	3	9
D3.2	Two protocols	3	9
D3.3	An evaluation framework	3	9
D4.1	Proceedings of the 2 <sup>nd</sup> PhD workshop	4	24
D4.2	Experiments in 6 residential subdivisions	4	30
D4.3	Documentation of the experiments	4	30
D4.4	Three conference papers	4	30
D4.5	A project website	4	30
D5.1	A journal paper on the theoretical framework	5	36
D5.2	A journal paper on the validated tools	5	36
D5.3	A report with recommendations	5	36
D5.4	A report discussing tools	5	36
D5.5	Proceedings of the 3 <sup>rd</sup> PhD workshops	5	36
D6.1	A 5-minutes video	6	36
D6.2	A book with recommendations	6	36
D7.1	A project manual	7	2
D7.2	A progress report	7	18
D7.3	A final report	7	36

<sup>8</sup> Deliverable numbers in order of delivery dates. Please use the numbering convention <WP number>.<number of deliverable within that WP>. For example, deliverable 4.2 would be the second deliverable from work package 4.

<sup>9</sup> Measured in months from the project start date (month 1).

**Table 6.3: List of milestones**

Milestone number	Milestone name	Work package(s) involved	Expected date <sup>10</sup>
M1	Kick-off meeting	1,2,6,7	2
M2	1 <sup>st</sup> National moment of reflection	1	5
M3	1 <sup>st</sup> PhD workshop	2	5
M4	Three e-meetings defining the protocols and action plan	3	9
M5	1 <sup>st</sup> Round of experiments and events	4	10
M6	2 <sup>nd</sup> National moment of reflection	4	14
M7	2 <sup>nd</sup> PhD workshop	4	15
M8	2 <sup>nd</sup> Round of experiments and events	4	16
M9	3 <sup>rd</sup> Round of experiments and events	4	22
M10	3 <sup>rd</sup> National moment of reflection	5	33
M11	3 <sup>rd</sup> PhD workshop	5	34
M12	Publication of book and 5-min video	6	36
M13	De-brief meeting	7	36

<sup>10</sup> Measured in months from the project start date (month 1)

**Table 6.4: Work package description**

Work package number	1	Start date or starting event:				01.2017
Work package title	FRAMING THE TRANSITION CHALLENGES					
Project partner number	1	2	3	4	5 (lead)	6
Project partner short name	UH	Intra	RUC		ENSA-M (lead)	IV
Person-months per applicant:						

### Objectives

**To COMPARE the transition challenges** in the three involved countries. The objective is not to collect new data, but to build upon the knowledge present within the consortium.

### Description of work

**Task 1.1: to map the socio-spatial dynamics** of the selected residential subdivisions in relation to the larger urban ecosystem. All cases are part of ongoing research (see included letters of intention), so that the consortium partners have an extensive knowledge of local issues, spatial features, actors, opportunities, economic trends, legal context, etc. Project partners: UH/RUC/ENSA-M.

**Task 1.2: to develop a state-of-the-art overview** of existing technical and conceptual models that are developed to address these dynamics. And applying this state-of-the-art to all cases in order to explore possible transition pathways. This is based on the expertise that the consortium partners gained in other projects (see 5.3 & 11.2). Project partners: UH/RUC/ENSA-M.

**Task 1.3: to organize a Kick off meeting** that involve all consortium partners. Task Leader: ENSA-M.

**Task 1.4: to organize a first national moment of reflection**, as part of a capacity building process among professionals. Project partners: all.

### Deliverables

Number	Name	Month
D 1.1	a SWOT analysis of all 6 cases clarifying the unique situation	06.2017
D 1.2	a submitted joint journal paper and presentations discussing the integrated state-of-the-art on retrofitting residential subdivisions (in e.g. European Planning Studies, Environment and planning B - Planning and Design, Urban Studies)	06.2017
D 1.3	data-visualizations sketching the state-of-the-art in all involved countries. E.g. average m2, prices, role of local authority, availability of info, etc.	06.2017
D 1.4	a blog with every-day stories from inhabitants living in residential subdivisions. E.g. the challenges they experience, the changes they make, etc.	06.2017
D 1.5	a program for excursions involving all national stakeholders	06.2017
D 1.6	a list of all relevant organizations in all three countries	06.2017

Work package number	2	Start date or starting event:				01.2017
Work package title	MAPPING COLLECTIVE CAPABILITIES					
Project partner number	1	2	3 (lead)	4	5	6
Project partner short name	UH	Intra	RUC (lead)		ENSA-M	IV
Person-months per applicant:						

### Objectives

**To DEVELOP a draft theoretical framework** that defines the concept of capacity building within the context of retrofitting residential subdivisions. This will be done on the basis of former empirical research (of the consortium) and literature review.

### Description of work and role of applicants

**Task 2.1: to document the collective capabilities** that are required to transform residential subdivisions into smart and robust urban ecosystems. This is based on an ex-post-facto analysis of previous research of the consortium partners. The five core capabilities, defined by Baser & Morgan (2008), will serve as framework. Project partners: UH/RUC/ENSA-M.

**Task 2.2: to develop a first draft of a theoretical framework** on capacity building supporting the creation of smart and robust urban ecosystems. This framework will list central concepts, conditions, approaches, etc. This is based on a desktop analysis of literature on community development, empowerment planning, development planning, collaborative learning, etc. The consortium has reviewed and published on this literature (see 11.2). Project partners: UH/RUC/ENSA-M.

**Task 2.3: to organize a first PhD workshop** to referee the research findings. Task Leader: RUC.

### Deliverables

Number	Name	Month
D 2.1	a conference paper presenting the taxonomy of collective capabilities required to transform residential subdivisions (e.g. AESOP, ISOCARP, PDC, EUROGEO)	06.2017
D 2.2	a conference paper presenting a theoretical framework that positions capacity building within the field of spatial planning (see above)	06.2017
D 2.3	proceedings of the first PhD workshop	06.2017

Work package number	3	Start date or starting event:				07.2017
Work package title	DEFINING AN EXPERIENTIAL LEARNING PROTOCOL					
Project partner number	1 (lead)	2	3	4	5	6
Project partner short name	UH (lead)	Intra	RUC		ENSA-M	IV
Person-months per applicant:						

### Objectives

To **PLAN** the capacity building experiments

### Description of work and role of applicants

Task 3.1: **to define the goals for the 6 selected residential subdivisions**, both regarding the challenges to address and the capabilities to develop. *The selected cases are part of ongoing research (see included letters of intention).*

Task 3.2: **to translate the methods to facilitate location-based experiential learning**, namely telling, enacting & making (Brandt et al., 2013), to the particularities of each case. Each partner has extensive expertise with, at least, one method:

- **telling**: In Vivo (F) developed the Bimby method to engage with residents of residential subdivisions
- **enacting**: X (Dk) developed games to facilitate participation to address urban issues
- **making**: Intrastructures (B) developed the OpenStructures platform to support the future prototyping

Task 3.3: **to draw up an action plan** that defines the order of experiments, based on the theoretical framework of WP2. This plan will a/o define which capabilities will be developed, when and where.

Task 3.4: **to define a common experiential learning protocol** to conduct each experiment. This protocol is based on the four stage learning cycle of Kolb (1984).

Task 3.5: **to define a documentation protocol**, in order to exchange information, both within one case, as between the cases of the involved countries, as to interested parties

Task 3.6: **to organize three e-meetings** that involve all consortium partners. Task Leader: UH.

All tasks involve UH/RUC/ENSA-M, with the exception of 3.2 and 3.3 involving all partners.

### Deliverables

Number	Name	Month
D 3.1	an action plan, including project briefs for each case: planning, locations, results, responsibilities, actors, etc. (see scheme in 6)	09.2017
D 3.2	an experiential learning protocol and a documentation protocol	09.2017
D 3.3	an evaluation framework consisting of (measurable) success criteria, regarding both the challenges to address and the capabilities to develop	09.2017



Work package number	4	Start date or starting event:				10.2017	
Work package title	RUNNING THE EXPERIMENTS						
Project partner number	1 (lead)	2	3	4	5	6	
Project partner short name	UH (lead)	Intra	RUC		ENSA-M	IV	
Person-months per applicant:							

### Objectives

To **CONDUCT** the experiments and to build an **INTERNATIONAL NETWORK** on capacity building within residential subdivisions

### Description of work and role of applicants

Task 4.1: **to implement the action plan**, namely three experiments per residential subdivisions. Each experiment addresses particular capabilities and adopts a particular experiential learning method (telling, enacting, making). Each experiment involves residents, professionals, NGO's and local authorities. In all, the experiments last for 1,5 years

Task 4.2: **to organize three public events per case** in order to involve the larger community. One of the three events is an international one, on which all project stakeholders are invited (see WP1)

Task 4.3: **to organize regular e-meetings** that involve all consortium partners. Task Leader: UH.

Task 4.4: **to disseminate the results** beyond the project consortium. E.g. further developing the wikibimby website; publishing on the European Knowledge Network, etc. France involves Italy & Canada. Denmark involves Sweden, Norway & Spain. And Belgium involves Germany.

Task 4.5: **to organize a second PhD workshop** to referee the research findings. Task Leader: UH.

Task 4.6: **to organize a second national moment of reflection**, as part of a capacity building process among professionals. Task Leader: UH.

All tasks involve UH/RUC/ENSA-M, with the exception of 4.1 and 4.4 involving all partners.

### Deliverables

Number	Name	Month
D 4.1	proceedings of the second PhD workshop	12.2018
D 4.2	the transformation of 6 residential subdivisions into smart and robust urban ecosystems	06.2019
D 4.3	extensive documentation of six cases: transcriptions of interviews, observations, photographic, future scenario's, economic analysis, lists of participants, etc.	06.2019
D 4.4	three conference papers (one per country describing the cases)	06.2019
D 4.5	a project website (an update of an existing website, e.g. Wikibimby) to support the international learning network	06.2019

Work package number	5	Start date or starting event:				07.2019
Work package title	VALIDATION, SYNTHESIS & GENERALISATION					
Project partner number	1	2	3 (lead)	4	5	6
Project partner short name	UH	Intra	RUC (lead)		ENSA-M	IV
Person-months per applicant:						

### Objectives

To **VALIDATE** the theoretical framework and to **FORMULATE** recommendations directed at professionals, local authorities, & local communities

### Description of work and role of applicants

Task 5.1: **to validate the experiments** relying on the evaluation framework defined in WP3. This will result an updated theoretical framework. Project partners: UH/RUC/ENSA-M.

Task 5.2: **to synthesize and generalize the results** of the experiments relying on the theoretical framework defined in WP2 and the debriefing models commonly used within the context of experiential learning (Dennehy et al., 1998). This will result in recommendations. Project partners: UH/RUC/ENSA-M.

Task 5.3: **to organize a third PhD workshop** to referee the research findings. Task Leader: RUC.

Task 5.4: **to organize a third national moment of reflection**, as part of a capacity building process among professionals. Task Leader: RUC.

### Deliverables

Number	Name	Month
D 5.1	a journal paper discussing the theoretical framework on capacity building within a context of retrofitting residential sub (e.g. see WP1)	12.2019
D 5.2	a journal paper discussing an integrated set of validated tools to support capacity building processes (e.g. see WP1)	12.2019
D 5.3	a report with recommendations directed at professionals, local authorities, local communities, etc. This are illustrated stories of both best practices, and failures	12.2019
D 5.4	a report discussing tools to support capacity building. The report will specify, for each tool, what is contextual, and what can be generic	12.2019
D 5.5	proceedings of the third PhD workshop	12.2019

Work package number	6	Start date or starting event:				03.2017	
Work package title	DISSEMINATION						
Project partner number	1 (lead)	2	3	4	5	6	
Project partner short name	UH (lead)	Intra	RUC		ENSA-M	IV	
Person-months per applicant:							

### Objectives

**To BUILD CAPACITY** among the stakeholders involved in the project and **to PROMOTE THE ADOPTION of the project's results** on a local, national and EU level

### Description of work and role of applicants

Task 6.1: **to develop tools to communicate** on capacities. Capacity building processes are long term processes with a variety of stakeholders that change continuously. This requires tailor-made communication tools in order to keep all involved.

Task 6.2: **to document** the process (see WP 3 & 4)

Task 6.3: **to organize three international PhD workshops** (see other WP's)

Task 6.4: **to organize three national moments of reflection** (see other WP's)

Task 6.5: **to publish** in academic & professional journals (see other WP's)

Task 6.6: **to report on social media** (e.g. Facebook, twitter)

All tasks involve UH/RUC/ENSA-M, with the exception of 6.6 involving all partners.

### Deliverables

Number	Name	Month
D 6.1	a 5 minutes video summarizing the overall project for a lay audience. The video will be in French & English.	12.2019
D 6.2	a book with recommendations for professionals, local authorities, local communities, etc. (see WP5)	12.2019

Work package number	7	Start date or starting event:				01.2017
Work package title	PROJECT MANAGEMENT					
Project partner number	1 (lead)	2	3	4	5	6
Project partner short name	UH (lead)	Intra	RUC		ENSA-M	IV
Person-months per applicant:						

### Objectives

To manage internal **COMMUNICATION**, communicate with the contracting authorities, monitor the progression and control the overall quality

### Description of work and role of applicants

Task 7.1: **to set up a consortium agreement**, including financial management and contingency.

Task 7.2: **to coordinate and manage** the CAPA.CITY project. This includes: the development of a project manual including project assignment, project objectives, role descriptions, project communication structure and PhD co-tutelle; guaranteeing an efficient communication flow between the consortium (e.g. relying on a web-based intranet platform to share information, such as e.g. Sharepoint); administrative and management support for the execution of the WPs; and managing the administrative, financial, legal and contractual obligations towards the funding agency.

Task 7.3: **to monitor the project implementation**. This includes monitoring activities, coordinating communication and dissemination, delivering of progress reports (including financial reports) and executing the contingency plan.

Task 7.4: **to organize a Kick off (see WP1) and De-brief meeting** that involve all consortium partners.

### Deliverables

Number	Name	Month
D 7.1	a project manual (result of the kick off meeting)	02.2017
D 7.2	a progress report	06.2018
D 7.3	a final report (result of the de-brief meeting)	12.2019

## **\_RISKS and contingency plans**

In general, the development risk in fundamental research is to be considered as low. There is neither a development risk in technical nor in financial terms to be expected. With regard to the CAPA.CITY proposal, the development risk, in terms of the fulfilment of the objectives, is low given that the team members are well acquainted with running research projects that size and have joint working experience.

- The **academic partners** of the CAPA.CITY consortium have comprehensive experience in the required fields of planning and research, both in the fundamental and applied field and has executed several core projects exploring the role of civic participation to achieve 'Smart integrated urban development'. The partner's expertise is complementary, at the same moment the partly overlapping competencies ensure a swift, interdisciplinary progression of the project.
- The **non-academic partners** of the CAPA.CITY consortium have comprehensive experience in developing and applying location-based experiential learning methods in participatory projects. And this in collaboration with citizens, local authorities and NGO's. Contingency: If development problems arise (i.e. lacking of materials and/or infrastructure to run the experiments), the academic partners will provide internal funding (or the required materials and technicians) to complete the experiments.
- All consortium members have **solid national networks** guaranteeing a large uptake of the theoretical and operational frameworks and the validated set of tools.
- The 6 residential subdivisions that make up the cases, are **part of ongoing research projects** and therefore ensure that the experiments will be able to get the necessary number of participants in in order to gain enough data. Contingency: in case there are not enough participants, the researchers will get in contact with other organizations/institutions, i.e. schools, vocational colleges but also our own classes at universities, etc. to ensure a valid sample.
- The CAPA.CITY consortium is soundly settled in **the international research and planning community** and all partners have comprehensive experience in fundamental and applied research
- The academic partners of the CAPA.CITY consortium are well acquainted with **the supervision of PhD researchers**.

## 7. Ethical and regulatory considerations (max. ½ page)

There are no ethical and/or regulatory issues and considerations including authorization requirements (scientific ethics, data security and use of laboratory animals or other) and handling of health, environmental or ethical issues associated with the project.

All participants of the experiments will be informed in advance and will, if required, confirm their participation by signing a collaboration protocol.

## 8. Added value of European trans-national co-operation (max. 1 page)

The consortium is a co-operation between academic and non-academic partners from three European countries: Belgium, Denmark & France.

- The three countries involved in the CAPA.CITY proposal are experiencing **a similar institutional transition**, be at different stages. In 2007, Denmark went through an administrative reform that consolidated the 270 municipalities into 98 larger units, most of which have at least 20,000 inhabitants. At this moment, France is going through a similar process. In Belgium, the Flemish government stimulates municipalities to merge and develops visions on how to speed up this administrative reform. This similarity in ambition, but difference in implementation, makes that the three involved countries can learn from one another.
- Residential subdivisions are increasingly facing **the same four challenges**, all over Europe, be it in different degrees. Though the social, economic and cultural context may be different in all these countries, it is our hypothesis that all answers to these challenges require a redistribution of roles, responsibilities and ambitions among all those involved in these subdivisions. In other words that they require processes of capacity building. For this reason, CAPA.CITY will support cross-country learning on the challenges and changing functional role of residential subdivisions as part of bigger urban ecosystems.
- The non-academic partners each have an extensive expertise in applying one particular location-based experiential learning methods. During the experiments, these partners will apply their method in all 6 residential subdivisions in Belgium, France and Germany. This will allow the non-academic partners to test their method in a different socio-cultural context and to **exchange experiences** with peers. This may be the start of an international learning network (see further).
- As argued earlier, the development of collective capabilities is context-dependent, as it relies on existing capabilities, precise objectives, internal resources, the external context, etc. In order to overcome this case-dependency, CAPA.CITY proposes to build **an international learning network**. This would allow practitioners, NGO's, businesses and authorities to exchange experiences, best practices, innovative procedures and instruments, etc. The proposal is to start from the learning network that was developed within the [BIMBY-project](#) (managed by one of the partners) and expand it more internationally.

## 9. Relevance – Contribution of the project to the goals of the call (max. 1 page)

- Regarding the overall goal of the ENSUF-call, namely “*addressing new solutions in urban sustainable development, and demonstrating the feasibility to tackle the implementation gap*”: the point of departure of the CAPA.CITY proposal is that tackling this gap requires capacity building involving both citizens, businesses, NGO’s and authorities. In order to develop capacity building strategies CAPA.CITY will rely on a transdisciplinary cooperation between researchers and practitioners (see project consortium) and citizens, businesses, NGO’s and (local) authorities (in the cases). For the same reason, the consortium is explicitly interdisciplinary involving **architects, designers, spatial planners, ethnographers, anthropologists and psychologists**.
- Regarding the topic ‘*Concepts and strategies for smart urban transformation, growth and shrinkage*’: the proposal is to focus on one urban context, namely **the retrofitting of residential subdivisions**. These are currently facing four challenges (see 4.1 Method). These challenges are triggering a number of niche dynamics (e.g. collective wastewater treatment, cooperative energy production, collective modes of transport, local service-hubs). In line with the ENSUF-call, CAPA.CITY will research how these dynamics could develop into smart and sustainable transition pathways.
- Regarding the issues that should be addressed within this topic, namely:
  - (1) “*How to create a holistic vision, (...)*”. The main objective of CAPA.CITY is to build **a theoretical and operational framework** to develop collective capabilities that are necessary to support the creation of smart and robust urban ecosystems. Collective learning, by definition, implies the creation of holistic visions as participants have different agendas and backgrounds.
  - (2) “*How to consolidate a long-term commitment of innovation triangles*”. Capacity building requires a long term engagement of both citizens, NGO’s, businesses and authorities. Change through capacity building implies that all parties involved should be willing to adjust their current role and responsibility. For this reason, WP3 takes 1.5 year, with (minimum) three experiments in each case (see Figure 2).
  - (3) “*Development and implementation of new technologies and systems to support participatory urban planning and decision making (...)*”. CAPA.CITY experiments with novel location-based experiential learning methods involving new technologies and systems such as **interactive visualization software** (In Vivo), **3D-printing** (Intrastructures) and **digital games** (X).
  - (4) “*Explore which specific social innovations, new products or tools, and services could help cities (...)*” This exploration is exactly the objective of the location-based experiential learning methods, namely to initiate and sustain **a collective learning** process that involves citizens, local authorities and local organisations and businesses.



## 10. Impact of the project (max. 2 pages)

### 10.1 Expected impacts

- The ENSUF-call proposes *“to use the transition process to create a smart and robust urban ecosystem”*. But, in reality such processes more often lead to resistance, than to *“an increase in awareness”* or *“smart change”*. This resistance comes from both citizens and (local) authorities. Capacity building can help to untangle this resistance by making the underlying reasoning explicit, and can, as such, help to collectively formulate strategies to address this obduracy. The main value of the CAPA.CITY proposal is that it will develop **a theoretical and operational framework** that will help (local) authorities, NGO’s, practitioners to initiate, consolidate and evaluate processes of capacity building. These frameworks will be supported by **a set of validated tools** to initiate and sustain capacity building processes, and **an international learning network** of both academics and professionals focussing on the retrofitting of residential subdivisions.

The theoretical framework will be discussed in a series of **peer reviewed journal papers** (see WP5). The operational framework will be summarized in **a book** and **a project website**. Both will discuss a series of best practices and failure scenarios and will end with **recommendations** (do’s and don’ts) for professionals, local authorities and citizens. The set of will be discussed in this book and will be accompanied by **testimonies** from participants that took part in the experiments. The book will be published under the Creative Commons licence. The learning network will be supported by a **website** and a **5 minutes video**. The proposal is to depart from an existing website, namely [wikibimby.fr](http://wikibimby.fr).

- The operational framework will be developed for one particular urban context, namely existing residential subdivisions. This context can be found back in all European countries. All are facing the same four challenges (see 4.1 Method). This makes that the **retrofitting strategies**, generated throughout the CAPA.CITY project, will be relevant beyond the 6 involved residential subdivisions.
- The non-academic partners have extensive experience in using their respective location-based experiential learning methods in urban contexts different from residential subdivisions. For this reason, **the set of validated tools will be generic** enough to initiate and sustain capacity building processes to address a range of transition challenges.
- The proposal will pay explicit attention to the implementation of capacity building processes on a regional scale, given the labour-intensive character of such processes (see objective 4). For this reason, CAPA.CITY will organize **national moments of reflection**, initiating capacity building process among professionals in the partner countries.
- Practitioners, NGO’s and authorities are struggling with the implementation of **participatory processes**, as they introduce a level of uncertainty. Capacity building could help all actors involved to deal with this uncertainty and, as such, help to create a positive climate for civic participation.
- The CAPA.CITY consortium has a limited geographical range. But all partners have close co-operations on the topic of retrofitting residential subdivisions with both academic and non-academic organizations in **other European countries**: Hasselt University (UH) has close co-operations with academic partners in Germany; Roskilde University (RUC) with Sweden, Norway & Spain; and ENSA-Marseille with Italy & Canada. Throughout the process, research findings will be presented to these partners via PhD-workshops (see WP6). These partners will also help to disseminate the project results beyond the three involved countries.

## 10.2 Dissemination and/or exploitation of project results, and management of intellectual property

### Management of Knowledge – Intellectual Property

In general, the consortium partners will agree on the joint ownership of all project results. The Intellectual property rights will be established in the consortium agreement (see WP7), which is to be elaborated and signed by official representatives after the approval of the proposal. The draft version is to be developed by the lead partner and has to consider and be in line with the particular regulations of the participating entities.

### Dissemination Strategy

A detailed dissemination strategy will be developed according to the tasks specified in WP6. The scheme below illustrates how CAPA.CITY aims to reach a variety of target groups with a variety of communication means. Some of the organizations that are listed in the scheme confirmed their interest in the CAPA.CITY proposal with **a letter of intent**.

	TARGET GROUPS	
	ACADEMIC	NON-ACADEMIC: professionals, local authorities, citizens
Publications	Publishing in <b>peer-reviewed journals</b> such as: European Planning Studies, Environment and planning B - Planning and Design, Urban Studies, International Planning Studies, Regional Studies	- Publishing in <b>professional journals</b> - Publishing <b>reports, a book, a 5 minute video</b>
Events	- Participation in <b>conferences</b> such as: AESOP, ISOCARP, PDC, EUROGEO and Homes-uP - Organizing <b>international PhD workshops</b>	- Organizing <b>public events</b> to conclude each of the 18 experiments (see Figure 2) - Organizing <b>national moments of reflection</b>
Digital media	A project <b>website</b> : Wikibimby	A project <b>website</b> : Wikibimby
Network activities	Taking part in <b>academic networks</b> such as COST, ISOCARP, EAEE	Taking part in <b>national planning networks</b> such as VRP (Be), Société Française des Urbanistes (F), Office Professionnel de Qualification des urbanistes (F)

## 11. Project consortium and management, multi-actor and trans-disciplinary collaboration, co-creation

### 11.1 Management structure and procedures (max. 1 page)

CAPA.CITY consists of a small consortium of three academic and three non-academic partners with a complementarity in expertise and operating in a different socio-economic context (see 11.2). In order to manage this complementarity expertise and diversity of contexts, CAPA.CITY proposes to work with **well-defined work packages** and a **clear research methodology** (built around 6 cases and 3 experiential learning methods).

The **academic partners** lead the work packages and coordinate the national experiments. The **non-academic partners** are each responsible for introducing one experiential learning method and for supervising the adoption of this method in the experiments. The experiments will be prepared, conducted and assessed by **PhD students and post-doc students**. These will be supervised by both the academic and non-academic partners.

The function, membership and the precisely defined role and responsibilities of each partner will be outlined and formalized in detail in **the consortium agreement and project manual** which will be set and signed after the approval of the application (see WP7).

**Steering Committee (SC):** is the executive body of the consortium. It shall monitor and review the work progress and will take executive decisions in all scientific and administrative issues that may arise during the preparation period and the implementation of the project, especially on:

- Detailed planning and scheduling of work packages
- Detailed monitoring of the project progress (scientific, administrative, financial)
- Preparation and collection of reports and results of WPs
- Solving of disputes and in case taking contingency actions

Each partner will nominate a person for the steering committee, which conveys at least every 6 months and addresses at least the above mentioned.

**Project Coordinator (PC)** will

- Administer and manage the project in general
- Represent the Consortium against the funding agency and the National Funding Agencies (FWO, IFD, ANR)
- Act as the main contact hub in the consortium for internal and external communication
- Review the reports to verify consistency with the project tasks before transferring them to the funding agency
- Monitor the compliance by partners with their obligations und the agreement.

The coordinator may not subcontract any of the above mentioned tasks. UH, as the lead partner, will nominate the PC.

The **Work Package Leaders (WPL)** will be in charge of the implementation and execution of the particular work packages (WP). They are responsible for effective communication between the partners within the WP, monitoring the progress of the particular work tasks, including the milestones, deliverables and reports of their WPs. They have to contribute to the preparation work of the reports (with the SC) regarding all activities in the WP as requested by the PC and SC. The responsibility for the WPs is shared between the partners (cf. section 6).

## 11.2 Individual project partners

<b>PROJECT PARTNER 1: HASSELT UNIVERSITY</b>
<b>Faculty of Architecture &amp; Arts – Research group ArcK</b>
<b>BRIEF DESCRIPTION</b>
<p>ArcK is the research group of the departments of Architecture and Interior Architecture. The main topics of ArcK centre around four clusters: Adaptive reuse; Spatial Capacity Building; Designing for More (user-space interaction) and Sustainability (in design product and process). Research in the cluster of capacity building departs from the conviction that designing is a complex process involving many stakeholders. The central research question is how to actively include and engage users, future users, and other stakeholders in different stages of the design practice, ranging from the design of public furniture, to public space, and even structure plans. Given this question, the main objective is to develop capacity building processes and strategies that attempt to increase the resilience of persons, groups, organizations or systems against spatial transformation processes taking place in a suburban context. Prototyping (making) is explored as one of the instruments to support such processes and strategies.</p>
<b>MAIN TASKS</b>
<ul style="list-style-type: none"> <li>- Fundamental and applied research on the role of design in initiating and sustaining processes of capacity building to address spatial transformation processes</li> <li>- Supporting (local) authorities in addressing the negative impact of dispersed urbanisation via action research and research-by-design student assignments.</li> <li>- supporting spatial professionals in organizing spatial capacity processes via workshops.</li> </ul>
<b>EXPERIENCE</b>
<ul style="list-style-type: none"> <li>- Devisch, O. &amp; Huybrechts, L., 2016. Building spatial capacities to retrofit the dispersed city. Exploring the role of design. In: Proceedings of the Traders Conference, 21st – 22nd November, Royal College of Art, London.</li> <li>- Devisch, O., Poplin, A. &amp; Sofronie, S., 2016. The gamification of civic participation. Two experiments in improving the skills of citizens to reflect collectively on spatial issues. Journal of Urban Technology, 23(2), 81-102.</li> <li>- Huybrechts, L.; Dreessen, K. &amp; Schepers, S., 2015. Uncertainties Revisited: Actor-Network Theory as a Lens for Exploring the Relationship between Uncertainties and the Quality of Participation. In: International Journal of Actor-Network Theory and Technological Innovation (IJANTTI), 7 (3), p. 49-63.</li> <li>- Huybrechts, L. et al., 2014. Participation is Risky. Approaches to Joint Creative Processes. Antennae series, 13. Amsterdam, Netherlands.: Valiz.</li> <li>- 2016: VRP-Lab Participation, workshop series with spatial professionals on capacity building</li> <li>- 2015-2017: Tales of the allotment, exhibition on the retrofitting of residential subdivisions</li> <li>- 2014-2017: Play!UC, JPI-urban Europe project on the use of games to engage citizens</li> <li>- 2014-2017: Traders, FP7 research project on the role of design in citizen participation</li> </ul>
<b>PROFILE OF STAFF MEMBERS (involved in CAPA.CITY)</b>
<p>Prof. Oswald Devisch, associate professor, urban planner / Liesbeth Huybrechts, post. Doc., media &amp; cultural studies / Marijn van de Weijer, post. Doc, expert on residential subdivisions / Barbara Roosen, PhD student on retrofitting residential subdivisions</p>

<b>PROJECT PARTNER 2: Infrastructures (Intra)</b>
<i>BRIEF DESCRIPTION</i>
<i>MAIN TASKS</i>
- ...
<i>EXPERIENCE</i>
- ...
<i>PROFILE OF STAFF MEMBERS (involved in CAPA.CITY)</i>

<b>PROJECT PARTNER 3: Roskilde University (RUC)</b>
<i>BRIEF DESCRIPTION</i>
<i>MAIN TASKS</i>
- ...
<i>EXPERIENCE</i>
- ...
<i>PROFILE OF STAFF MEMBERS (involved in CAPA.CITY)</i>

<b>PROJECT PARTNER 4: X</b>
<i>BRIEF DESCRIPTION</i>
<i>MAIN TASKS</i>
- ...
<i>EXPERIENCE</i>
- ...
<i>PROFILE OF STAFF MEMBERS (involved in CAPA.CITY)</i>



<b>PROJECT PARTNER 5: project[s] of ENSA-Marseille (ENSA-M)</b>
<b>BRIEF DESCRIPTION</b>
<p>“project[s]” is one of the laboratories of ENSA-M. ENSA-M is part of IMVT (Institut méditerranéen de la ville et des territoires / Mediterranean institute of city and territories) including the School of Landscape Architecture (ENSP) and the Institute of Urban Planning (IUAR). ENSA-M is associated to AMU (Aix-Marseille University) within doctoral school 355 “Espace, culture et société/Space, culture and society”.</p> <p>Created in 2014 by fusion of two small laboratories (INSARTIS and ABC), project[s] is focused on the “project” as a “process of design and building driven by an author” as defined by JP.Boutinet. Project[s] is interested in transformation of the living environment of human society that involves different disciplines of project: civil architecture, landscape architecture, urban design and urban planning, industrial design, art and engineering. These disciplines are represented within project[s] thanks to multi-disciplinarity of ENSA-M and IMVT. It concerns also politics, institutions and civilian society at junction of top-down and bottom-up processes. Society evolves rapidly. How then redefine and adapt processes, objects and authors' skills facing new societal challenges? To investigate this question project[s] propose to distinguish what is common to these disciplines and actors during project process from what is specific to them.</p> <p><a href="http://www.marseille.archi.fr/recherche/projects/">http://www.marseille.archi.fr/recherche/projects/</a></p>
<b>MAIN TASKS</b>
<ul style="list-style-type: none"> <li>- Project[s] expects to build a common knowledge and collaborative skills and methods between disciplines of project, institutions and inhabitants is one task of project[s] laboratory.</li> <li>- The second is to recognize their specificities, especially for architecture, throughout 5 axis : 1: Reflexive pedagogy for project; 2: Multi-scales territories and artefacts in project; 3: Designing facing risks; 4: Comfort, environment and project; 5: Computer models and methods for project.</li> <li>- CAPA.CITY will contribute to first task and to axis 1 and 2 of the second. Projects[s] lab propose the use of MATEA, an original multi-criteria methodology that helps to compare the points of view of actors involved in a project process. It propose also an methodology of immersive workshops.</li> </ul>
<b>EXPERIENCE</b>
<ul style="list-style-type: none"> <li>- 2008-2010 member of BIMBY research.</li> <li>- Hanrot, S. 2012, “Pour un BIMBY encadré : Rapport de synthèse– Recherche ANR-BIMBY sur la densification pavillonnaire”, Dir Scientifique rapport de recherche, ed. ENSA-Marseille, 2012.</li> <li>- Hanrot, S. 2015, “Pour une stratégie de projet urbain participatif dans les quartiers pavillonnaires”, in “La densification résidentielle au service du renouvellement urbain : filières, stratégies et outils” ed. Documentation Française, 2015, ISBN : 978-2-11-009943-3, DF : 5 HC 39230</li> <li>- 2005-2016 – Reflexive research on pedagogy by workshop, and various workshop by immersion.</li> <li>- Hanrot, S. 2012, The conflict as pedagogy of teamworks in workshops, in Dall’ ex tempore al workshop : esperienze di ricerca e progetto directed by Elio Trusilani, Rome, Gangemi Editore.</li> <li>- Hanrot, S. 2012, Le Workshop, entre pédagogie et engagement social, Seminario Workshop, Natal (Brésil). Actes du colloque ENANPARQ II 18-21 Septembre 2012.</li> </ul>
<b>PROFILE OF STAFF MEMBERS (involved in CAPA.CITY)</b>
<p>Prof. Stéphane HANROT senior researcher, Architect / Marion SERRE architect-participation manager, PHD / Arnaud SIBILAT architect, PhD student / Zineb AIT BOUALI architect, PhD student / Ion MALEAS architect, PhD student</p>

<b>PROJECT PARTNER 6: In Vivo (IV)</b>
<b>BRIEF DESCRIPTION</b>
<p>“In Vivo” is the department for Research &amp; Development of “Villes Vivantes” (“Living Cities”), a start-up with special status (“jeune entreprise universitaire” – “young academic enterprise”) under partnership agreement with ENSA –Marseille architecture academy. Created in January 2014, it develops, designs and tests innovative public policies, carrying a systemic vision in strategic and collaborative planning. It focuses on the needs and intentions of individual people to develop and implement collective actions and urban planning projects. It experiments sustainable and collaborative solutions to counter urban sprawl by redefining housing production processes. It develops the “BIMBY” (Build In My BackYard) concept, creating condition for a short supply chain of buildable land producing , from inhabitant to inhabitants, relying on private initiative, but with a supporting and engineered public framework designed with local authorities.</p>
<b>MAIN TASKS</b>
<ul style="list-style-type: none"> <li>- Providing professional training for planners, local communities, planning authorities via <a href="http://formation-invivo.fr/">http://formation-invivo.fr/</a> Core subject: “Methods, tools and innovative frameworks for smooth, harmonious and progressive evolution of existing neighbourhoods”.</li> <li>- Disseminating a regularly updated state of the art on publicly supervised residential subdivision via <a href="http://www.wikibimby.fr">www.wikibimby.fr</a> online wiki (free access, content under creative common by sa 2.0. licence).</li> <li>- Publishing and updating a guidebook listing knowledge, skills and qualities necessary to the architects conducting “BIMBY” (Build In My BackYard) interviews, with a focus both on communities and individual interests.</li> <li>- Stimulating and monitoring inhabitants “BIMBY” (Build In My BackYard) projects in relation with local planning authorities and local professional with a focus on innovation in experimental frameworks.</li> <li>- Fundamental research, applied research on existing neighbourhoods evolutions.</li> </ul>
<b>EXPERIENCE</b>
<ul style="list-style-type: none"> <li>- BIMBY (Build in My Back Yard, ANR Villes Durables 2009), conception of densification, diversification, and regeneration strategies aiming developed (built) neighbourhoods Partnership : CETE NC and CETE IdF (Ministère de l'Ecologie), LATTs (Ecole des Ponts), RIVES (ENTPE), Marseille, Paris Belleville and Rouen Schools of Architecture, CAUE27, Communauté d'Agglomération de Rouen (CREA) et de Saint-Quentin-en-Yvelines (CASQY).</li> <li>- “Transform existing detached houses neighbourhoods in sustainable cities” Report from project ANR – BIMBY 2010</li> <li>- “The inhabitant as a buildable land producer, a new key-player in local urban planning”, Urbanisme, 386, septembre-octobre 2012</li> <li>- “New methods for a new channel of land development”, Project ANR BIMBY 2011</li> <li>- “BIMBY+ A way to tailor-made, open-source, and democratic urban planning” ANR-BIMBY 2012</li> </ul>
<b>PROFILE OF STAFF MEMBERS</b>
<p>David MIET architect, architecture PhD, Engineer, urbanist / Thomas HANSS Landscape architecture engineer / Denis CARAIRE spatial planner, urbanist / Céline ANDREAULT PhD Student in architecture / Paul LEMPERIERE architect and planner</p>

### 11.3 Consortium as a whole (max. 1 page)

#### TRANS-DISCIPLINARY EXPERTISE of the CAPA.CITY consortium

The CAPA.CITY consortium consists of three academic and three non-academic partners. The academic partners have a trans-disciplinary and complementarity expertise (see also 11.2):

**Hasselt University** (B), with Prof. Dr. Oswald Devisch (**urban planner**) and Dr. Liesbeth Huybrechts, (**media and cultural studies**), has an expertise in initiating and sustaining **spatial capacity building** processes. In CAPA.CITY, the contribution of Hasselt University will be on framing the experiments by drawing up an action plan, defining a common experiential learning protocol and a documentation protocol (WP3 & 4).

**Roskilde University** (Dk), with Prof. Dr. John Andersen (**sociologist**) and Dr. Majken Toftager Larsen (urban planner), has expertise in **civic participation, strategic spatial planning and transition management**. In CAPA.CITY, the contribution of Roskilde University will be on framing the concept of capacity building in relation to a/o civic participation (see WP2).

**Ecole Nationale Supérieure d'Architecture de Marseille** (F), with Prof. Dr. Stéphane Hanrot (**architect**) and Dr. Marion Serre (**participation manager**), has expertise in the **pedagogy of architecture** and in the roles that a university can play in (local) society. In CAPA.CITY, the contribution of ENSA-M will be on framing the concept of residential subdivisions (see WP1).

The three non-academic partners are each responsible for introducing one experiential learning method, and, for this reason, also have a trans-disciplinary and complementarity expertise:

**Intrastructures** (B), with Thomas Lommée (**designer**) has expertise in prototyping as method to initiate a transition towards a more sustainable use of materials. In CAPA.CITY, Intrastructures will be responsible for the experiential learning method of '**making**'.

**X** (Dk) (...) In CAPA.CITY, X will be responsible for the experiential learning method of '**enacting**'.

**In Vivo** (F), with Dr. David Miet (**architect**) and Denis Caraire (**spatial planner**), has expertise in engaging residents of residential subdivisions in envisioning future scenarios. In CAPA.CITY, In Vivo will be responsible for the experiential learning method of '**envisioning**'.

#### CO-CREATION in a diversity of socio-spatial contexts

CAPA.CITY will conduct action research in 6 residential subdivisions (see WP1). All 6 are located in a dispersed urban context. And all experienced a major growth between the '60ies and '80ies. Apart from these similarities, the three countries introduce **three different socio-spatial contexts**: in Flanders (Belgium) the dispersion is that high that nearly any change in land-use raises conflicts. This makes it very difficult to start up new projects or initiate a spatial transformation process. In Denmark, an increasing number of municipalities loses inhabitants and/or services to the major cities. The question is how to sustain the liveability of these municipalities. In France the abundance of land, led to a poor management of space. As environmental awareness increases, densification becomes a challenge. Certainly when the main housing preference remains the detached single family house.

This diversity will make the final conclusions more relevant for other European countries. The proposal is to further increase this diversity by adopting complementary perspectives in addressing the specific contexts. In Flanders the focus would lie on the role of novel services; in Denmark on the role of novel types of public space; and in France on exploring novel types of development.

As mentioned earlier, all 6 cases are part of ongoing research conducted by the consortium partners. The included **letters of intent** make clear where the involved stakeholders see the added value of the CAPA.CITY proposal.